INVITED COMMENTARY

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The authors are among the few pioneers who have transferred laparoscopic techniques to aortic surgery. They now give a precise overview of their results and conclude that the technique is minimally invasive, yet more demanding than conventional surgery, with an outcome that is at least not worse than the open procedure. Cross-clamping time and length of the operation were significantly longer compared with open surgery, something we and other groups have also reported. Yet, because of the small sample size and the retrospective data collection, they cannot conclusively show that returning to a normal diet a day earlier justifies the more demanding procedure. This can now be accomplished with fast-track surgery as well. An evaluation of the long-term sequelae of aortic surgery such as incisional hernias, adhesions, and improved quality of life was not part of the study. The benefit of the laparoscopic technique will become clearer in studies that have a longer follow-up.

We cannot convince young surgeons who are interested in these techniques by telling them that here we have an operation that is more cumbersome, where blood loss is higher, but the outcome is at least not worse than open surgery. Our own group and others have concentrated for too long on merely showing what is feasible without trying to improve the laparoscopic technique in a way that is really minimally invasive, including shorter operating times and reduced blood loss. We all know that access trauma is only part of the game and that ischemia-reperfusion injury and bleeding complications are at least equally important.

It is probably not enough to transfer a conventional procedure into the videoendoscopic setting without any technical modifications that take into account the completely different kind of exposure. One solution can perhaps be a combination of laparoscopic and endovascular techniques to reduce ischemia time and to offer to our patients the best of two worlds and a truly minimally invasive operation.[1,2] Another option is improved instrumentation and, perhaps, an aortic stapling device.

This is another important report that shows we have to use the principles of evidence-based medicine to evaluate innovative techniques in daily practice. Only then will we know whether laparoscopy can be established as a second minimally invasive way to treat aortic aneurysms.

REFERENCES

1. Lin JC, Kolvenbach R, Pinter L. Combining open and endovascular surgery for the treatment of infrarenal abdominal aortic aneurysm: a case report using a hybrid vascular graft. J Vasc Surg 2005;41:881-4.
2. Kolvenbach R, Pinter L, Ragunandan M, Cheshire N, Ramadan H, Dion YM. Laparoscopic remodeling of abdominal aortic aneurysms after endovascular exclusion: a technical description. J Vasc Surg 2002;36:1267-70.